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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,774

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Douglas Heintzman

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EXAMINER

LEE, PING

ART UNIT

PAPER NUMBER

2615

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,774	HEINTZMAN ET AL.	
	Examiner	Art Unit	
	Ping Lee	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,10,13,29-31 and 36-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,10,13,29-31,36-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 38-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly amended claim 38 specifies “data associated with a device profile and an audio profile”. This newly added limitation is not supported by the specification and the drawings as originally filed. On p. 14, lines 9-16, it is clearly stated that the audio profile includes a user profile and a device profile. On p. 16, lines 14-22, the audio profile is also defined including a device profile and a user profile. Based on these disclosures, one skilled in the art would have expected the device profile is a part of the audio profile. The amended claims imply that they are separate units. The current invention as disclosed cannot have audio profile and device profile as two independent units simultaneously. Therefore, the amended claim 38 and claims depending on it introduce new matter.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the audio profile" in 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 29, 30, 37 and 42-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Lemelson et al (hereafter Lemelson) (US 7,110,951).

Regarding claim 29, Lemelson discloses a method and a corresponding apparatus, comprising:

receiving data indicative of acoustic conditions proximate to an audio presentation device (TV) (for reducing ambient noise by 22 in Fig. 2; Fig. 8 shows the microphone 84; Fig. 3 is also used for reducing background noise; col. 12, lines 29-30; "system noise" as specified on line 36 of col. 12);

receiving data (reads on user's response as specified on col. 5, lines 38-42; according to dictionary, data means factual information) indicative of a detected acoustic test signal;

receiving data associated with at least one audio profile (26 or 24); and

determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation device, at least a portion of the data indicative of a detected acoustic test signal (user's response), and at least a portion of the data associated with the at least one audio profile (26 or 24). See col. 3, lines 5-58, col. 8, line 67, col. 9, lines 1-2 and col. 18, lines 2-9. The claimed processor reads on the processor 14 as shown in Fig. 2. The CPU (14) performs the functions according to a computer program product in a computer readable medium (col. 18, lines 58-59). As shown in Fig. 2, the CPU receives data from each unit (16, 22, 24, 26, 28, 30, 32 and 34).

Regarding claim 30, Lemelson shows that the test signal is provided (col. 5, lines 24-30).

Regarding claim 37, Lemelson shows the CPU (14) determines that a new user using the audio presentation device (through button 132 as shown in Fig. 10; col. 7, lines 24-25).

Regarding claims 42, 44 and 45, Lemelson discloses a method, comprising:
receiving data indicative of a detected acoustic test signal (user's responses; col. 5, lines 38-42; according to dictionary, data means factual information);
receiving data indicative of acoustic conditions proximate to an audio presentation device (for reducing ambient noise by 22 in Fig. 2; Fig. 8 shows the microphone 84; Fig. 3 is also used for reducing background noise; col. 12, lines 29-30; "system noise" as specified on line 36 of col. 12);

receiving data associated with a user profile (26) and a device profile (24; col. 4, lines 41-58; col. 10, lines 37-41); and

determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation device and at least a portion of the data associated with the user profile and the device profile (col. 3, lines 50-58; col. 8, line 67, col. 9, lines 1-2; col. 18, lines 2-9).

Regarding claim 43, Lemelson discloses the capability, a characteristic, or a capability and a characteristic of a display device (col. 11, lines 26-51).

6. Claims 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Rader et al (hereafter Rader) (US 6,944,474).

Regarding claims 29 and 30, Rader discloses a computer program product in a computer readable medium which, when executed by a processor, performs a method comprising:

receiving data indicative of acoustic conditions proximate to an audio presentation device (mobile phone) (102 in Fig. 1; col. 2, lines 63-64);

receiving data indicative of a detect acoustic test signal (data, according to dictionary, means factual information; col. 3, lines 10-14, "...user to providing information...hearing test ... audio stimuli...");

receiving data associated with at least one audio profile (100 or 101) and

determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation

device, at least a portion of the data indicative of a detected acoustic test signal, and at least a portion of the data associated with the least one audio profile (105).

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 13, 29, 30, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rader et al (hereafter Rader) (US006944474B2) in view of Lewis et al (hereafter Lewis) (US006192255B1).

In view of 112, 1st paragraph rejection, “audio profile” specified in claim 38 has been treated as “user profile” for examination purpose.

Regarding claims 1, 13, 29, 30, 38 and 39, Rader discloses a method and a corresponding apparatus comprising:

receiving data indicative of acoustic conditions proximate to an audio presentation device (mobile phone) (102 in Fig. 1);

receiving data indicative of a detected acoustic test signal (data, according to dictionary, means factual information; col. 3, lines 10-14, “...user to providing information...hearing test ... audio stimuli...”);

receiving data associated with a user profile (100) and a device profile (920 in Fig. 10, 101 in Fig. 1 or col. 8, lines 2-4) and

determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation

device, at least a portion of the device profile, and at least a portion of the data associated with the user profile (100) and the device profile (920 in Fig. 10, 101 in Fig. 1, or col. 8, lines 2-4).

Rader teaches that the transfer of the profiles from a remote location to the mobile phone is allowed once the user entering PIN (col. 7, lines 38-45; col. 7, line 58-67; col. 8, lines 1-6) at the mobile phone. Rader fails to use the exact words "authenticating a user identification". Lewis also teaches a mobile phone that allows user requesting information retrieval from a remote site (abstract). Lewis explicitly states that PIN could be used for authentication (col. 4, lines 47-48) for ensuring communication security. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made, with both references before him/her, to use PIN for authentication in order to provide secure communication between the mobile phone and the remote site.

9. Claims 1, 10, 13, 36, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson.

In view of 112, 1st paragraph rejection above, "audio profile" as specified in claim 38 has been read as "user profile" for examination purpose.

Regarding claims 1, 10, 13, 36, 38 and 39, Lemelson fails to show that the user's identification is being authenticated. Lemelson teaches that the hearing test could be performed locally and the hearing profile can be stored and recalled later. The device profile could be updated by placing the remote control at different locations (col. 13, lines 40-60). Since the television as disclosed in Lemelson is shared by a plurality of

users, someone other than the user could have the access of the personal hearing profile if there is no restriction on who can recall the hearing profile or modifying the device profile if the device profile is not "locked away" electronically. User B might accidentally erase/modify the hearing file or device profile of User A who has a hearing impairment at 3 kHz and prefers to sit at a particular location. Examiner takes Official Notice that authenticating a user identification was notoriously well known in the art. Thus, one skilled in the art at the time of the invention was made would have been motivated to modify Lemelson by providing a well known access protection, such as authenticating the user, to prevent other people from accidentally erase/modify the hearing profile and device profile, or simply for privacy reason.

10. Claims 31 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Feezor et al (hereafter Feezor) (US 3,808,354).

Regarding claims 31 and 40, Lemelson fails to show receiving a portion of the acoustic test signal from an acoustic detector. Feezor teaches that it is important to measure the acoustic test signal at the testing location in order to determine whether the testing result is valid (col. 40, lines 51-53) during the hearing test. Thus, it would have been obvious to one of ordinary skill in the art to modify Lemelson in view of Feezor by receiving the acoustic test signal during the testing in order to validate the hearing test result.

11. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Feezor as applied to claim 40 above, and further in view of Hotvet (US 5,550,923).

Regarding claim 41, Lemelson teaches how to use an adaptive filter to obtain the optimal filter coefficients to cancel noise and enhance the speech; however, it fails to clearly discuss that the signal-to-noise ratio is being used for enhancing the speech. Hotvet teaches how to use the SNR based on the signal and noise to determine the optimal hearing (col. 9, lines 19-60). Thus, it would have been obvious to one of ordinary skill in the art to further modify Lemelson and Feezor in view of Hotvet by utilizing the determined SNR in combination with the adaptive filter in order to enhance the speech intelligibility.

12. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Rader.

Regarding claim 46, Lemelson fails to show that the processor is located remotely from the audio presentation device. Lemelson's processor is located with the television. Rader teaches an audio presentation device which allows the audio signal to be generated to compensate hearing impairment of the user. Rader suggests that a processor could be located remotely from the audio presentation device (col. 7, lines 32-33), so the processor could be shared by a plurality of users and audio presentation devices, and the audio presentation devices could be made with less cost and size without the processor. Thus, it would have been obvious to one of ordinary skill in the art to modify Lemelson in view of Rader by using a remotely located processor to process the hearing profile, ambient noise condition and the room acoustics in order to reduce the cost of the television and its size as well.

Response to Arguments

13. Applicant's arguments filed 5/28/08 have been fully considered but they are not persuasive.

Applicant argued that Lemelson or Rader fails to show the limitation of "receiving data indicative of a detected acoustic test signal" because a computer product does not "hear". This is not persuasive. Applicant's definition is based on the disclosure in the specification. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Data, according to dictionary, means factual information. So the definition does not require a computer product to "hear" the data. As long as the computer receiving the factual information, the limitation is met. The user's responses (in both Lemelson and Rader) are factual information provided to the CPU in Lemelson or the processor in Rader for deriving the hearing ability of the user. The user's responses, the factual information, indicate a detected or not detected acoustic test signal by the user. Therefore, both Lemelson and Rader disclose the claimed limitation "receiving data indicative of a detected acoustic test signal".

Applicant argued that Lemelson fails to show a device profile. Examiner disagrees. On col. 4, lines 41-58 and col. 10, lines 36-56, the audio sound from the speaker is modified based on the room acoustics. The equalization/compensation (24) in Lemelson stores the device profile that would be used with the user profiled (26) to compensate the hearing impairment of a user located at the particular environment.

Art Unit: 2615

14. Applicant's arguments with respect to claims 1, 10, 13, 36, 38-41 have been considered but are moot in view of the new ground(s) of rejection.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522.

The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ping Lee/
Primary Examiner, Art Unit 2615

pwl